

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/contact name and address:

Nick Hendrickson
PO Box 1448
West Yellowstone, MT 59758-1448

2. Type of action: Yellowstone Controlled Groundwater Area Permit No. 41F 30112426. The applicant proposes to appropriate 35 gallons per minute (GPM) up to 3.90 acre-feet (AF) per year of water from two wells. The wells are located within the Yellowstone Controlled Groundwater Area (YCGA).
3. Water source name: Groundwater. Well GWIC ID No. 295539 is located approximately 425 feet west of the South Fork Madison River; well GWIC ID No. 295540 is located approximately 225 feet west of the South Fork Madison River
4. Location affected by project: S½SESE of Section 23, T13 S, R04 E, Gallatin County. These wells are located on private property at 4420 Targhee Pass Highway, West Yellowstone, MT 59758. (See Figure 1 for a map on the next page.)

YCGA Permit 41F 30112426 by Nick Hendrickson



Figure 1: Map of location affected by project.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to pump 35 GPM up to 3.90 AF per year of water for domestic purposes year-round and for seasonal lawn and garden irrigation of 1 acre from two wells, GWIC ID Nos. 295539 and 295540. The water from both wells measured 44°F at the wellheads. The water from GWIC ID No. 295539 had a specific conductance of 116 micromhos, and the water from GWIC ID No. 295540 had a specific conductance of 121 micromhos, when both were later measured at a licensed drinking water laboratory. The National Park Service was notified of this application.
6. Agencies consulted during preparation of the Environmental Assessment:
 - Montana Department of Fish, Wildlife & Parks (DFWP) – Montana Fisheries Survey and Inventory
 - <https://myfwp.mt.gov/fishMT/>
 - Montana Department of Environmental Quality (DEQ) – Clean Water Act Information Center (CWAIC)
 - <http://deq.mt.gov/wqinfo/CWAIC/default.mcpix>
 - Montana National Heritage Program (MTNHP) – Species of Concern:
 - <http://mtnhp.org/SpeciesOfConcern>
 - U.S. Fish & Wildlife Service (USFWS) – National Wetlands Inventory Wetlands Mapper
 - <http://www.fws.gov/wetlands/Data/Mapper.html>
 - Natural Resource Conservation Service (NRCS) – Web Soil Survey (WSS)
 - <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No significant impact.

The source of water is groundwater, which is not listed by DFWP. The nearest surface water is the South Fork Madison River, which is located approximately 225 feet to the east from GWIC ID No. 295540.

As determined by an April 20, 2018, search, DFWP does not list the South Fork Madison River as chronically or periodically dewatered. The wells' proposed flow rate of 35 GPM and annual

volumetric usage of 3.90 AF will not have a significant impact on nearby surface water flow or water users.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: No impact.

The source of water is groundwater, which is not listed by the Montana Department of Environmental Quality (DEQ). The wells are unlikely to affect adjacent surface water quality, as Bridger Drilling, a licensed driller (license number WWC-560), constructed the wells in accordance with the rules of the Board of Water Well Contractors.

According to an April 20, 2018, search of the CWAIC website, the South Fork Madison River is listed as fully supporting drinking water use. DEQ reported having insufficient information to assess aquatic life and did not assess the ability of this reach to support primary contact recreation or agriculture. These wells are unlikely to impact the surface water quality.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: No significant impact.

The source of water is groundwater. Groundwater quality is not likely to be affected by the proposed well, as Bridger Drilling, a licensed driller, constructed the wells in accordance with the rules of the Board of Water Well Contractors.

The nearest well is located approximately 225 feet from nearby surface water in the South Fork Madison River. The proposed 35 GPM and 3.90 AF per year are not likely to have a significant impact on surface water flows, nor are they likely to have a significant impact on nearby water right owners. Water use will be measured with a meter supplied by DNRC.

The U.S. National Park Service has been notified of this application pursuant to the State of Montana/U.S. National Park Service Compact, Article II, Section B.2.b.ii.3.(b).

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No significant impact.

Consistent with applicable laws and locally accepted practices, water will be diverted using wells with a pump, and use will be measured using a water meter supplied by the Department. These wells were constructed by Bridger Drilling, a licensed driller, in accordance with rules of the Board of Water Well Contractors. No significant impacts to existing resources have been identified.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: No significant impact.

An April 20, 2018, search of the MTNHP Species of Concern website returned the following results:

- 13 animal Species of Concern: Wolverine, Hoary Bat, Little Brown Myotis, Grizzly Bear, Brown Creeper, Evening Grosbeak, Cassin’s Finch, Clark’s Nutcracker, Long-Billed Curlew, Green-Tailed Towhee, Brewer’s Sparrow, Western Toad, and Westslope Cutthroat Trout.
- 0 animal Potential Species of Concern.
- 1 animal Special Status Specie: Bald Eagle.
- 6 plant Species of Concern: Whitebark Pine, Slender Indian Paintbrush, Alkali-Marsh Ragwort, Slender Thelypody, Many-Flowered Viguiera, and Dwarf Onion.
- 0 plant Potential Species of Concern.
- 0 plant Special Status Species.

As this proposed application is to divert water from wells located on private property adjacent to a major highway, no significant impacts will occur to threatened, endangered, or special concern species. The pumping of groundwater will not decrease surface water flows to significantly impact any of these species.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No significant impact.

According to an April 20, 2018, search of the USFWS Wetlands Mapper, the southeast corner of this parcel contains freshwater forested/shrub wetlands. These wells have already been drilled, and much of the parcel has been disturbed or subject to constructions. The impact of using water from these wells on the nearby wetlands will not be significant.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: Not applicable.

No ponds are involved in the project.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No significant impact.

These wells were constructed by Bridger Drilling, a licensed driller, in accordance with rules of the Board of Water Well Contractors, so there should not be significant impacts on nearby soil quality. Use of water will occur in a manner consistent with locally accepted, historical practices and will not significantly impact soil quality. An April 20, 2018, search of the NRCS WSS site did not identify any saline seeps in the area.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No significant impact.

These wells were constructed by Bridger Drilling, a licensed driller, in accordance with rules of the Board of Water Well Contractors, so there should not be significant impacts on nearby vegetative cover. The continued pumping of water from these wells should not significantly impact the surrounding area's vegetative cover and neither should it allow the establishment of noxious weeds. Under Montana law, property owners are responsible for noxious weed control on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impact.

These wells have already been drilled and no deterioration of air quality will result from the diversion of water from the wells.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: Not applicable.

The project is not located on State or Federal Lands. Furthermore, the applicant made no mention of significant historical or archeological sites on the property.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No impact.

No other demands on environmental resources of land, water, and energy have been identified.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: No significant impact.

Drilling wells for water supply and using water for domestic purposes are locally accepted practices within the state of Montana and the Hebgen Lake area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No impact.

There are significant recreational and wilderness activities in the area, but the proposed project is located entirely on private property adjacent to a major highway and will not impact access to or the quality of recreational and wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No significant impact.

The water will be used for multiple domestic and lawn & garden purposes. The Montana Department of Environmental Quality regulates water quality for water wells serving multiple users.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes ___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: The project does not impact government regulations on private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No impacts identified.
- (b) Local and state tax base and tax revenues? No significant impacts identified.
- (c) Existing land uses? No significant impacts identified.
- (d) Quantity and distribution of employment? No impacts identified.
- (e) Distribution and density of population and housing? No significant impacts identified.
- (f) Demands for government services? No significant impacts identified.
- (g) Industrial and commercial activity? No impacts identified.
- (h) Utilities? No impacts identified.
- (i) Transportation? No impacts identified.
- (j) Safety? No impacts identified.
- (k) Other appropriate social and economic circumstances? No impacts identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:* No mitigation or stipulation measures are anticipated at this time.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* If the applicant is not allowed to divert water from the wells, they may not be able to supply the dwellings with water for domestic purposes. Since the property is located in a rural region, they cannot connect to a municipal system, but they may be able to haul water in. The no-action alternative would leave their house without domestic water.

PART III. Conclusion

1. ***Preferred Alternative:*** The preferred alternative is to obtain a water right permit to use water from the drilled well.
2. ***Comments and Responses:*** None at this time.
3. ***Finding:***
Yes___ No **X** *Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The EA is the appropriate level of analysis because the proposed project is to divert groundwater from two small wells within the YCGA for multiple domestic and lawn & garden purposes, which are locally accepted practices, and no significant adverse effects are anticipated. None of the identified impacts for any of the alternatives is significant as defined in ARM 36.2.524.

Name of person(s) responsible for preparation of EA:

Name: Brent Zundel

Title: Hydrologist

Date: June 4, 2018